

1/EH-63 (i) (Syllabus-2015)

2019

(October)

ZOOLOGY

(Elective/Honours)

FIRST PAPER

(Systematics, Animal Diversity and Evolution)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

**Answer Question No. 1 which is compulsory and
any four from the rest**

1. Write in brief on any three of the following :

4×3=12

- (a) Six-kingdom classification**
- (b) Canal system of sycon**
- (c) Respiratory system in cockroach**
- (d) Salient features of amphioxus**
- (e) Geological timescale**

2. What are the general characteristics of chordates? Highlight the diagnostic features of the class Mammalia. 5+6=11
3. Describe the life cycle of *Entamoeba histolytica*. Add a note on its pathogenicity. 7+4=11
4. Describe the structure of water vascular system of *Asterias* with suitable diagram. 9+2=11
5. With the help of suitable diagram, describe the digestive system of rabbit. 2+9=11
6. Explain Charles Darwin's theory of Evolution and the deductions that lead to the theory of natural selection. 7+4=11
7. (a) Give an account of the aquatic respiration in *Pila* with suitable diagram. 5+2=7
(b) Describe the salient features of *Balanoglossus*. 4
8. Write short notes on any two of the following : 5½×2=11
 - (a) Taxonomic hierarchy
 - (b) Pathogenicity of *Ascaris lumbricoides*
 - (c) Paleontological evidences of evolution
